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5 Accounting for Chinese Trade: Some National and Regional Considerations

K. C. Fung

5.1 Introduction

In this paper I examine various conceptual and data issues related to trade and investment in China. This topic is interesting because China is the most dynamic, fastest growing economy in the world. Despite cycles of inflation and contraction, real GDP in China has grown at almost 10 percent annually over the period 1979–92. For the coastal provinces, from Guangdong in the south up through Fujian, Jiangsu, Zhejiang to Shandong in the north, the annual growth rate averaged over 12 percent for the same period (Ho 1993). This economic performance has led many to predict that China will one day be the next economic superpower (Survey of China 1992). For example, Larry Summers (1992) once extrapolated that if the growth differential between China and the United States during the 1980s persists, China could surpass the United States to become the largest economy in the world in 11 years. He further pointed out that if the per capita income of China reached that of Taiwan, China's GDP would exceed that of all Organization for Economic Cooperation and Development (OECD) countries. According to estimates by the

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Table 5.1 China's Foreign Merchandise Trade

Year	Total	Exports	Imports
1978	20.7	9.8	10.9
1979	29.4	13.7	15.7
1980	38.1	18.1	20.0
1981	44.0	22.0	22.0
1982	41.6	22.3	19.3
1983	43.6	22.2	21.4
1984	53.5	26.1	27.4
1985	69.7	27.4	42.3
1986	73.8	30.9	42.9
1987	82.7	39.4	43.2
1988	102.8	47.5	55.3
1989	111.7	52.5	59.1
1990	115.4	62.1	53.4
1991	135.7	71.9	63.8
1992	165.6	85.0	80.6
1993	195.8	91.8	104.0

Source: China, State Statistical Bureau (1994).

Note: Figures are in billions of U.S. dollars. Exports are valued on a f.o.b. basis, imports on a c.i.f. basis.

International Monetary Fund (IMF) (1993), based on purchasing-power-parity exchange rates, China has the third highest GDP in the world, behind only the United States and Japan. Some argue that China's economic performance since the economic reform era has brought about one of the biggest improvements in human welfare anywhere at any time (Survey of China 1992).[1]

Since December 1978, when the history-making third plenary session of the eleventh Central Committee of the Chinese Communist Party decided to abandon the Stalinist strategy for growth and opted for a program of open door policies and reforms, there has been a tremendous increase in China's foreign trade activities. In the prereform era, China had traded relatively little with the outside world, given its size. By 1992, China's total foreign trade volume ranked eleventh in the world, a jump from thirty-second in 1979. Using China's official statistics, table 5.1 shows the changes over time in China's trade.[2]

1. As China grows in importance, the amount of research into various aspects of China has also exploded; see, e.g., Lau (1995), Wong (1995), Wong, Heady, and Woo (1993), and McKinnon (1991). However, work on the foreign trade of China and direct investment in the country has been relatively sparse. Exceptions are, e.g., Sung (1991), Liu et al. (1992), Lardy (1994), Fung (1997, 1996), Fung and Iizaka (1998), and Fung and Lau (1996). Baldwin and Nelson (1993), Bergsten and Noland (1993), Feenstra (1995), Ito and Krueger (1993), and Noland (1990) contain recent research related to trade and trade policies with Taiwan or Hong Kong.

2. As Lardy (1992) points out, even different agencies within the Chinese government report Chinese data differently. For example, Ministry on Foreign Economic Relations and Trade export statistics on processing include only the processing fees earned from such exports, which are less than 10 percent of the value of the exports. By contrast, China's customs statistics include the entire value of these exports.

The money value of China's merchandise exports of $85 billion (U.S. dollars) in 1992 was more than eight times the $9.8 billion in 1978. In nominal terms, this means a compound growth rate of 16.8 percent per year. For imports, the $80.6 billion in 1992 was more than seven times the $10.9 billion in 1978. This translates into nominal growth of 15.4 percent. This is almost twice as fast as the growth of global trade for the same period. According to the OECD (1993), China was sixteenth by its share of global exports in 1990, with a share of 1.6 percent of world exports. But if we add Hong Kong and Taiwan to mainland China (Greater China), Greater China's rank was fifth, behind only the United States, Japan, Germany, and France.

Beyond the very rapid growth of China's economy and trade and the country's new role as a global player, there are other reasons why I want to look into data concerning China's trade. First, Chinese trade data are often at odds with the data of its trading partners. Trade data discrepancies are actually quite common, but the situation with China is particularly striking. In 1992, for example, according to Chinese statistics exports to the United States were $8.6 billion and imports from the United States were $8.9 billion. This translates into a small U.S. *surplus* of $0.3 billion. But U.S. trade statistics show that imports from China were $25.7 billion and exports were $7.4 billion, resulting in a U.S. trade *deficit* of $18.3 billion. From an economic standpoint, bilateral trade imbalance is not generally a cause for concern, but political factors often cause trade imbalances to fuel trade frictions. Trade data discrepancies between China and its trading partners heighten these trade tensions.

A significant part of the discrepancy in trade data related to China is due to Chinese trade with and via Hong Kong, its small but prosperous southern neighbor. According to China's customs statistics, 44 percent of China's 1992 exports went to Hong Kong and 26 percent of China's 1992 imports came from Hong Kong. Using these figures, Hong Kong is China's largest trading partner.

Because of its strategic location, its modern facilities in banking, finance, insurance, transportation, and other services, and the fact that there is a sound legal framework in place, Hong Kong is China's main gateway to the West, and vice versa. Much of Hong Kong's role in China's trade is to act as a middleman. This means that a lot of trade involving Hong Kong is entrepôt trade: reexport and transshipment. Even after 30 June 1997, when Hong Kong will become officially a part of China, Hong Kong will remain a separate customs territory and a separate member of the General Agreement on Tariffs and Trade (GATT)—more accurately, the World Trade Organization (WTO)—according to the 1984 Sino-British Joint Declaration and also according to the promise that China had made to GATT. In other words, the problems with China's trade data due to a separate Hong Kong are not likely to go away in the near future.

Until very recently, China's official trade data counted exports to Hong Kong for consumption in Hong Kong and exports to Hong Kong to be reexported elsewhere both as exports to Hong Kong. Similarly, U.S. goods reexported via Hong Kong to China are not always counted as U.S. exports to China in U.S.

data. We will look at China's trade by taking into account its important *reexport* character.[3] One example of this complication is that using Chinese data, Hong Kong was the largest exporter to China from 1987 to 1992. But in 1993, when Chinese authorities began to trace the origin of Chinese imports more seriously, Hong Kong dropped to fourth largest exporter behind Japan, the United States, and Taiwan (Sung 1994).

Another source of the problem with China's trade statistics is the markup that the Hong Kong middleman adds to reexports to and from China. This added value is attributed to the exporting country but in fact should be attributed to Hong Kong. Thus, in addition to reexports, trade data with China should be adjusted by taking the reexport markup into account. Reexports and reexport markups affect China's trade with *all* countries and regions, including the three on which we will focus in this paper, Hong Kong, Taiwan, and the United States. Furthermore, both reexports and reexport markups are large and thus significantly affect Chinese trade data.

Another interesting aspect of China's trade is that a large part of it is fueled by foreign direct investment (FDI), particularly investment by Hong Kong and Taiwan in Guangdong and Fujian. Exports and imports related to investment are not unique to China, but such FDI-related trade is especially important in the Greater China region. In Chinese trade data, both geography and foreign ownership play an important role.

For geographical and historical reasons, China's trade with Taiwan is of special interest. According to 1992 Chinese trade data, Taiwan is China's fourth largest export market, behind Hong Kong, Japan, and the United States. Cold war politics and the historical rivalry between the Chinese Nationalists and the Chinese Communist Party caused most direct trade to be banned between Taiwan and mainland China. In 1978, mainland China wanted to reestablish mail, travel, and trade. Taiwan initially responded with a continuation of the "three no's policy": no contact, no negotiations, no compromise (Kao 1993). However, by 1985, Taiwan no longer interfered with indirect exports, though indirect imports were still to be subject to control. Taiwan's control of indirect imports would later be relaxed. Taiwan's official policy is still that all trade and investment must be carried out indirectly. A substantial portion of trade between mainland China and Taiwan is indirect reexport trade via Hong Kong.

In addition to reexports, which also form a large part of China's trade with its other trading partners (e.g., the United States), China-Taiwan trade is further characterized by forms of direct trade, such as transshipment, that are illegal from the Taiwanese standpoint.[4] Because of this illegal trade, statistics from Taiwan concerning China-Taiwan trade are also inaccurate. Based on the limited information we have, illegal trade is a large part of trade between mainland China and Taiwan.

3. Sung (1991) and, more recently, Lardy (1994), Fung (1997), and Fung and Iizaka (1998) were among the first to highlight quantitatively the importance of reexports in China's trade.

4. Kao (1993), Sung (1994), and Fung (1997) discuss the issue of transshipment.

From the U.S. side, trade with China represents both an opportunity and an increasing concern. China can be a large and growing market for American business; at the same time, the United States is worried about trade barriers in the Chinese market and the export potential of the Chinese. These worries have fueled several trade disputes. Some of the disputes have focused on the different ways that both sides look at trade data. For the United States, reexports and reexport margins are the dominant factors complicating the trade data.

In this paper I focus mainly on China's trade with and via Hong Kong, Taiwan, and the United States. There will also be special attention paid to the southern provinces of Guangdong and Fujian, where most FDI from Hong Kong and Taiwan takes place. Hong Kong and Taiwan deserve special attention because of their roles in FDI, reexport, and transshipment. U.S.-China trade is of interest because it highlights how different trade-accounting methods in data can lead to trade problems between important economic powers. In the next section, I examine and update the recent evolution of the Chinese foreign trade regime. In section 5.3, I look at the role of Hong Kong reexports in China's trade and discuss reexports and reexport margins in the context of trade with Hong Kong, Taiwan, and the United States. In section 5.4, I cover the importance of FDI-related trade, using first Hong Kong data, then official national Chinese data, and finally data from the provinces of Guangdong and Fujian. In section 5.5, I examine transshipment and other forms of illegal trade. There is some indication that smuggling is important for some segment of U.S.-China trade. Concluding remarks are given in section 5.6.

5.2 China's Evolving Foreign Trade Regime

Various writers have written about China's trade system (Sung 1991; Lardy 1992; Ho 1993; Fung 1997). In this section, we update and condense their work. Before 1978, the Ministry of Foreign Trade (MOFT) completely controlled China's foreign trade system. Under a mandatory trade plan, 15 product-specific national foreign trade corporations (FTCs) operated China's trade. International trade was just an extension of the domestic planning process. The Soviet style of material balances was used to construct the basic economic plan, which coordinated the flow of raw materials and intermediate goods among industries. The production of each good was equated to the intermediate and final demands by other major state enterprises. The plan used imports to fill the difference between planned demand and domestic production. Exports needed to pay for imports were then identified, first using goods of which there were excess supplies. The State Planning Commission set preliminary annual and long-term targets for broad categories of imports and exports. Then, on the basis of the State Planning Commission's targets, MOFT prepared more detailed plans and sent these plans to the FTCs.

Based on the foreign trade plan, the FTCs purchased goods from domestic enterprises at fixed prices, sold them abroad, and sent all foreign exchange to

the Bank of China, which was the sole organization allowed to handle foreign exchange. The FTCs bought fixed quantities of foreign goods for domestic use at fixed prices and paid foreign suppliers with foreign exchange obtained from the Bank of China. World market prices had little impact on the Chinese domestic prices of tradable goods. Since the renminbi (the mainland Chinese currency) was overvalued, the FTCs usually suffered a loss on exports but earned a profit on imports.

In 1979, provincial and municipal governments and some large state enterprises were allowed to establish their own foreign trade enterprises. In March 1982, China's trade regime was further reformed. MOFT, the Import-Export Administration Commission, the Foreign Investment Administration Commission, and the Ministry of Foreign Economic Relations were consolidated into the Ministry of Foreign Economic Relations and Trade (MOFERT), with the latter organization supervising the 15 national FTCs and the local foreign trade bureaus. Recently, MOFERT has been reorganized into the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) and given the responsibility to formulate and implement China's foreign trade policies.

In 1984, the State Council ended the monopoly power of the national FTCs and reduced the scope of foreign trade planning. The number of FTCs increased dramatically. In addition to the new national FTCs under the control of central government ministries and other state organizations, almost every provincial and municipal government had its own network of FTCs.

With decentralization, the number of FTCs increased from 15 in 1978, to more than 1,000 by the mid-1980s, to about 6,000 by the latter half of the 1980s. The new FTCs did not have to report to MOFERT. Unfortunately, there were some unscrupulous activities, and some new FTCs were unable to fulfill their contracts (e.g., some were unable to purchase the promised domestic goods for export). Since China had a long-standing reputation of fulfilling foreign contracts, the increasing failure to meet contractual obligations became a major concern not only to China's trading partners but also to the Chinese central authority.

These events led to a retrenchment in mid-1988. As many as 2,000 FTCs were dissolved, reorganized, or stripped of their right to conduct foreign trade. By the end of 1991, there were roughly 4,000 FTCs.

The scope of mandatory planning for foreign trade was also significantly reduced. The old foreign trade system was replaced by a system that combined mandatory planning, guidance planning, and the market. The 1984 trade reform assigned mandatory exports and imports (i.e., trade specified in quantitative terms) to designated national FTCs and allowed other FTCs to conduct their trade both within and outside the guidance plans. Unlike mandatory plans, guidance plans were generally specified in value terms. In addition to being more flexible, these plans allowed FTCs to take market demand and supply into account when deciding the mix of tradables within each broad product group.

The mandatory export plan covered about 3,000 items before 1979, but by 1988 the number fell to 112. By the end of the 1980s, exports under mandatory or guidance plans accounted for about 34 percent of total exports. Compared to the export system, the import system remained relatively unreformed in the 1980s. There were import licensing and high tariffs on protected products. In addition, almost all importers faced a series of complicated approval procedures. However, in the process of reforming the foreign trade system, the scope of mandatory planning for imports was also reduced. By 1991, no more than 40 percent of China's imports were under mandatory or guidance plans. In addition, as a consequence of a U.S. market access Section 301 case in 1992 and China's desire to join the WTO, China has made progress in making its trade regime more transparent.

In 1992, the Chinese government took important steps to reform its trade policy (World Bank 1993). A large number of trade documents previously unavailable to foreigners were published. Several steps were also taken to liberalize imports. The Customs Tariff Commission of the State Council reduced a large number of tariff rates. Rates were cut on 225 tariff lines, beginning on 1 January 1992. In addition, special import regulatory duties that had been instituted for 14 products in 1985 were lifted as of 1 April 1992.[5]

5.3 Issues Related to Reexports

The only data source on reexports that I am aware of are the official statistics of the Hong Kong government. Reexports, as defined by the Hong Kong government, occur when imports to Hong Kong are consigned to a buyer in Hong Kong who takes legal possession of the goods. These imports must clear customs (that is why Hong Kong has such statistics). Buyers in Hong Kong add a markup and then reexport the goods elsewhere. They may also undertake minor processing of the imports before reexporting them. However, they do not change the fundamental character or nature of the goods (no substantial transformation) so that *no* Hong Kong origin is supposed to be conferred. If the process substantially changes the imports, then they become goods "made in Hong Kong," and exports of these goods are regarded as exports of Hong Kong goods. They are then classified in official Hong Kong statistics as "domestic exports" rather than "reexports." Sung (1991) and, more recently, Lardy (1994) and Fung (1997) were among the first to consider the issue of reexports in the context of Hong Kong–China trade.

Reexports cost more than direct exports since they typically need additional loading, more customs clearing, and further insurance. The middleman also adds a markup before reexporting. In 1988, the Hong Kong Trade Development Council carried out a large-scale survey of Hong Kong traders. One find-

5. However, the effects of these measures have been essentially to bring the average tariff level back to pre-1987 levels (see World Bank 1993).

Table 5.2 **Reexports in Hong Kong Trade**

Reexport Category	1992	1993
1. Total reexports	690.8	823.2
2. Reexports to China	212.1	274.6
3. Reexports of Chinese origin	403.8	474.0
4. Reexports not involving China	95.1	96.5

Source: Hong Kong Government (1993).

Note: Figures are in billions of HK dollars. Rows 2, 3, and 4 sum to more than row 1 because reexports of Chinese origin back to China have been counted twice in rows 2 and 3.

ing was that the reexport markup on Chinese goods was 16 percent and the markup on other countries' goods was 14 percent. Another survey conducted by the Hong Kong Census and Statistics Department indicated that the reexport markup for all reexports in 1990 was 13.4 percent but the markup for Chinese goods was much higher. The department, however, did not publish the exact markup figure for Chinese goods in this survey. The higher markup for Chinese goods probably reflects the lower quality control on goods in China and Chinese producers' lack of information about overseas markets. Hong Kong middlemen thus need to do more repackaging and to look harder for markets for Chinese products.[6]

5.3.1 China–Hong Kong Trade

The bulk of trade between Hong Kong and China involves reexports. Hong Kong reexports registered significant growth in 1993. The value of reexports was HK$823 billion in 1993, about 19 percent higher than in 1992.[7] As reexports grew rapidly while domestic exports by Hong Kong declined, the share of reexports in total Hong Kong exports rose from 75 percent in 1992 to 79 percent in 1993.

China was the most important *source* of goods reexported through Hong Kong. In 1993, Chinese goods reexported via Hong Kong amounted to HK$474 billion, or 58 percent of total reexports (table 5.2). A large proportion of the reexports from China were products of outward processing commissioned by Hong Kong companies in China.[8] The major reexport items from China were clothing, telecommunications and sound recording equipment, footwear, and textile yarn and fabrics. China also remained the largest *market* for Hong Kong's reexports, accounting for HK$275 billion, or 33 percent in

6. Another interpretation is that the higher markup of Chinese goods reflects transfer pricing by mainland Chinese traders based in Hong Kong. I am indebted to Larry Lau for suggesting this interpretation.

7. The exchange rate between the HK and U.S. dollars is fixed. In 1993, the rate was U.S.$1 = HK$7.7.

8. I discuss trade related to outward processing in section 5.4.

Table 5.3 **Hong Kong Reexports by Major Market**

	1992	1993	Growth Rate in 1993 (%)
All markets	690.8	823.2	19
	(100)	(100)	
China	212.1	274.6	29
	(31)	(33)	
United States	148.5	180.3	21
	(21)	(22)	
Japan	37.5	44.2	18
	(5)	(5)	
Germany	33.1	40.8	23
	(5)	(5)	
United Kingdom	20.6	24.5	19
	(3)	(3)	
Taiwan	26.2	21.9	−16
	(4)	(3)	
Rest of the world	212.9	236.9	11
	(31)	(29)	

Source: Hong Kong Government (1993).

Note: Reexports values are in billions of HK dollars. Numbers in parentheses are shares of the reexports.

value terms of all goods reexported through Hong Kong in 1993 (table 5.3). Reexports to China consisted mainly of textile yarn and fabrics, textile madeup articles, motor vehicles, electrical machinery, telecommunications and sound recording equipment, industrial machinery, and plastic materials. The other major market for Hong Kong's reexports was the United States (accounting for HK$180 billion, or 22 percent of the total value in 1993).

Besides reexports, the Hong Kong government collects data on retained imports (imports for domestic consumption), which are defined as total imports by Hong Kong minus reexports. A more accurate definition would be total imports minus reexports adjusted for the reexport markup.[9]

If we take the average markup on Chinese goods to be around 16 percent, the amount of retained imports from China becomes negligible or *negative* in recent years (table 5.4). This implies that the markup for Chinese goods must be higher than 16 percent. However, we do not have much information on what the actual percentage is. In my interviews with Hong Kong businessmen in July 1994, a figure of 25 percent was suggested several times. Hong Kong officials who had presented cases in GATT also suggested that the markup was 25 percent. For the rest of this paper, we use an average reexport markup of 25 percent for Chinese goods.

Data on Hong Kong's exports to China also are complicated by the existence

9. See Sung (1991) for an early discussion.

Table 5.4 **Hong Kong Imports from China**

Year	Adjusted[a] Retained Imports	Unadjusted Retained Imports
1977	1,377	1,286
1979	2,268	2,076
1981	3,715	3,325
1983	4,048	3,588
1984	4,686	4,075
1985	4,546	3,790
1986	5,966	4,842
1987	7,428	5,591
1988	7,948	5,084
1989	8,801	4,698
1990	5,624	−549
1991	4,212	−3,913
1992	2,457	−7,975
1993	1,147	−11,108

Source: Hong Kong Government (various years, b).

Note: Values are in millions of U.S. dollars.

[a]Adjusted for 25 percent reexport markup.

of reexports. But, given that Hong Kong government statistics provide data on Hong Kong's *domestic exports,* we can rely on these as figures for exports of Hong Kong goods to China.

5.3.2 China–Taiwan Trade

As previously noted, Taiwan forbids Taiwanese firms from trading directly with China, so all trade is supposed to occur indirectly. Most of this indirect trade takes place via Hong Kong. Trading via Hong Kong is often referred to as "triangular trade." There is also indirect trade between Taiwan and mainland China via Japan, Singapore, Guam, and other third parties (Kao 1993). In terms of trade data, neither Taiwanese sources nor mainland sources are entirely accurate. The mainland data are again contaminated by lumping trade with Hong Kong and reexports together. In Taiwanese data, trade with China shows up mainly as trade with Hong Kong and other third parties. Table 5.5 shows Taiwanese indirect trade via Hong Kong, using Hong Kong data. There is also illegal direct trade that is not recorded properly in Taiwanese trade statistics. Trade with mainland China is heavily influenced by periods of contraction in China. The significant decrease of indirect trade between Taiwan and the mainland in 1982–83 and in 1986 was due mainly to mainland China's deflationary policies during those periods.

5.3.3 China–U.S. Trade

Chinese export statistics reported all exports to Hong Kong, whether for Hong Kong consumption or for reexport to the United States via Hong Kong

Table 5.5 **Trade between Taiwan and Mainland China via Hong Kong**

Year	Taiwan to Mainland	Mainland to Taiwan
1979	21	55
1980	242	78
1981	390	76
1982	208	89
1983	168	96
1984	425	127
1985	987	116
1986	811	144
1987	1,226	289
1988	2,242	478
1989	2,896	586
1990	3,278	765
1991	4,679	1,129
1992	6,288	1,119

Source: Hong Kong Government (various years, a).
Note: Figures are in millions of U.S. dollars.

Table 5.6 **U.S. Exports to China Adjusted for Reexports**

Year	U.S. Source	Reexports to China via Hong Kong		Total Adjusted Exports	
1993	8.77	2.79	(3.18)	11.56	(11.95)
1992	7.47	2.06	(2.35)	9.53	(9.82)
1991	6.29	1.50	(1.71)	7.79	(8.00)
1990	4.81	1.16	(1.32)	5.97	(6.13)
1989	5.76	1.16	(1.32)	6.92	(7.13)

Sources: Hong Kong Government (various years, a) and U.S. Department of Commerce (various years).
Note: Figures are in billions of U.S. dollars. Numbers in parentheses are unadjusted for reexport markup.

as exports to Hong Kong. Chinese import statistics do take country of origin into account, but inconsistently. U.S. import data distinguish country of origin, including reexports, but U.S. export data deal with exports to Hong Kong inaccurately. This is because reexports, by definition, change legal possession, and U.S. exporters do not always know the final destination of the U.S. goods.

In calculating U.S. exports to China, we should add reexports of American goods via Hong Kong to China to recorded exports to China (although this may overstate the error because the U.S. data may capture some exporters who know and declare that the final destination of the goods is China even when they are first shipped to Hong Kong). Table 5.6 illustrates the importance of taking reexports into account when using U.S. export data.

The amount of U.S. goods reexported to China via Hong Kong is not trivial.

Table 5.7 **Adjusted U.S.–China Bilateral Trade Balance (U.S. Source)**

Year	Unadjusted Balance	Adjusted Trade Balance	
1993	−22.76	−15.63	(−19.59)
1992	−18.26	−12.58	(−15.91)
1991	−12.68	−8.50	(−10.97)
1990	−10.43	−7.17	(−9.11)
1989	−6.18	−3.38	(−4.91)

Sources: See table 5.6.

Note: Figures are in billions of U.S. dollars. Numbers in parentheses are not adjusted for re-export margins.

On average over 1989–93, reexports were *30.0 percent* of U.S. direct exports to China. Another important issue is the role of the reexport margin. Hong Kong middlemen raise the value of the U.S. goods shipped via Hong Kong. The average markup on non-Chinese goods is 14 percent. Reexports and total exports not discounted by the markup are given in parentheses in table 5.6.

U.S. imports take reexports into account. While there are severe difficulties in tracing the country of origin (Krueger 1995), this problem is not unique to trade with China. We assume that U.S. data for imports from mainland China are by and large correct, or at least no worse than other published sources. But we do need to take the reexport margin into account. For Chinese goods, we take a markup of 25 percent, as discussed earlier. The adjusted trade balance, taking both reexports and reexport margins into account, is

Adjusted U.S. trade balance with China

= (Direct exports of U.S. goods to China

+ Reexports of U.S. goods to China via Hong Kong

− 14% reexport margin)

− (Direct imports of Chinese goods to the U.S.

+ Reexports of Chinese goods to the U.S. via Hong Kong

− 25% Reexport margin).

Using the adjusted figures, U.S.-China bilateral trade deficits are shown in table 5.7. The adjusted trade deficits, using U.S. and Hong Kong data, are quite different from the unadjusted, published deficits. If we use deficits adjusted for both reexports and reexport margins, the deficits have to be revised downward by 31.1, 33.0, 31.3, and 45.3 percent for the years 1992, 1991, 1990, and 1989, respectively. This gives a four-year average of 35.2 percent.[10]

10. This downward revision is larger than those reported in Lardy (1994) primarily because of the use of a different reexport margin. West (1995) also reported different adjustments because she used different markups for different periods and she also took into account other minor adjust-

Table 5.8 **Adjusted U.S. Trade Deficit with China**

Year	Adjusted Chinese Data		Adjusted U.S. Data		Chinese Source	U.S. Source
1989	2.14	(3.7)	3.38	(4.91)	−3.5	6.18
1990	5.84	(7.8)	7.17	(9.11)	−1.4	10.43
1991	7.42	(9.9)	8.50	(10.97)	−1.8	12.68
1992	12.12	(15.5)	12.58	(15.91)	−0.3	18.26
1993	20.95	(24.9)	15.63	(19.59)	6.3	22.76

Sources: See table 5.6 and China, General Administration of Customs (various years) and Hong Kong Government (1993).

Note: Figures are in billions of U.S. dollars. Numbers in parentheses are not adjusted for reexport margins.

Table 5.8 shows six different U.S. trade imbalances with China: published U.S. data, which show a growing trade deficit; published Chinese data, which show a U.S. surplus until 1993, when reexports were beginning to be considered; Chinese data adjusted for reexports only (in parentheses); Chinese data adjusted for both reexports and reexport margins; U.S. data adjusted for reexports only (in parentheses); and U.S. data adjusted for both reexports and reexport margins. The most reliable amount should be the U.S. data adjusted for both reexports and reexport margins. However, as noted earlier, this correction overstates the problem, since some U.S. firms that export to China via Hong Kong may know in advance the final destination and may declare this on their customs forms.

If we compare the adjusted Chinese data with the U.S. published data, we see that the discrepancies are diminishing over time. As percentages of the published U.S. data, the adjusted Chinese data are 34.6, 56.0, 58.5, 66.4, and 92.1 percent from 1989 to 1993, respectively. If we use adjusted U.S. data as the benchmark, as a percentage the differences between U.S. adjusted data and Chinese adjusted data are 36.7, 18.6, 12.7, 3.66, and −34.0 percent from 1989 to 1993. It is interesting that by 1992, the difference between the two adjusted numbers is negligible. This gives us indirect confirmation that our adjustments are not completely off the mark.

5.4 Issues Related to FDI-Related Trade

5.4.1 China–Hong Kong Outward Processing Trade

The Hong Kong Census and Statistics Department began to compile statistics on domestic exports and reexports to China related to outward processing in the third quarter of 1988 and statistics on imports from China related to outward processing in the first quarter of 1989. According to the Hong Kong government, outward processing arrangements are made between Hong Kong

ments (such as the low-level threshold; i.e., U.S. customs does not report export transactions that are under U.S.$2,500).

Table 5.9 **Hong Kong Domestic Exports to China of an Outward Processing Nature as a Share of Total Domestic Exports to China, by Product Group (percent)**

Product Group	1989	1990	1991	1992	1993
Textiles	84.8	84.2	83.7	87.4	86.8
Clothing	85.1	87.9	89.6	93.2	94.2
Plastic products	83.9	86.1	79.6	77.5	81.5
Machinery and electrical appliances	56.7	62.2	58.6	59.7	54.0
Electronic products	94.6	94.4	92.5	92.7	94.7
Watches and clocks	98.5	97.3	98.1	98.5	98.6
Toys, games, and sporting goods	96.4	96.9	96.1	91.9	97.2
Metals and metal products	64.2	71.1	73.5	69.0	65.1
All products	76.0	79.0	76.5	74.3	74.0

Source: Hong Kong Government (various years, a).

companies and manufacturing entities in China under which the companies concerned subcontract all or part of the production processes relating to their products to the Chinese entities. Raw materials or semimanufactures are exported to China for such processing. The Chinese entity involved can be a local enterprise, a joint venture, or some other form of business involving foreign investment (Hong Kong Government 1994). Almost four-fifths of Hong Kong manufacturers have transferred production to China. About 25,000 factories in the Pearl River Delta region of Guangdong are engaged in outward processing for Hong Kong companies, while 3 to 4 million workers are directly or indirectly employed by these firms (Ash and Kueh 1993). In 1993, the entire labor force in manufacturing in Hong Kong was only 0.5 million. Employment in China for outward processing of Hong Kong goods is then between six to eight times that in Hong Kong. Tables 5.9, 5.10, and 5.11 document, respectively, the extent of domestic exports, imports, and reexports related to Hong Kong processing in China.

From tables 5.9, 5.10, and 5.11, we see that 74 percent of Hong Kong's domestic exports to China were related to outward processing in 1993. The highest amount of outward processing was in watches and clocks, with 98.6 percent. For the five years between 1989 and 1993, the overall percentage is fairly consistent, hovering between 74.3 and 79 percent. For imports from China, there is an increase from a low of 58.1 percent in 1989 to a high of 73.8 percent in 1993. As with domestic exports, watches and clocks had the highest outward processing ratio in 1993. For Hong Kong's reexports to China, table 5.11 shows that in 1993, 42.1 percent of all products were for outward processing. Compared to domestic exports and imports, this lower ratio is due to the low outward processing character of bulkier reexports such as machinery and electrical appliances and metal and metal products (26.1 and 35.8 percent in 1993, respectively). Bulkier items tend to be produced outside of Hong Kong and reexported via Hong Kong to China without further processing. As

Table 5.10 **Hong Kong Imports from China of an Outward Processing Nature as a Share of Total Imports from China, by Product Group (percent)**

Product Group	1989	1990	1991	1992	1993
Textiles	12.8	18.2	20.5	23.0	27.3
Clothing	84.5	87.4	86.6	84.4	83.1
Plastic products	73.4	78.0	84.8	89.3	90.4
Machinery and electrical appliances	77.8	73.3	78.7	81.0	76.4
Electric products	85.2	88.7	89.7	92.7	91.5
Watches and clocks	94.6	94.9	96.4	94.3	95.8
Toys, games, and sporting goods	94.1	94.8	92.1	96.9	91.6
Metals and metal products	30.2	32.5	29.6	43.6	52.3
All products	58.1	61.8	67.6	72.1	73.8

Source: Hong Kong Government (various years, a).

Table 5.11 **Hong Kong Reexports to China of an Outward Processing Nature as a Share of Total Reexports to China, by Product Group (percent)**

Product Group	1989	1990	1991	1992	1993
Textiles	71.5	75.9	77.1	81.9	81.0
Clothing	87.3	86.5	84.1	76.0	80.2
Plastic products	58.0	68.7	58.3	64.5	63.0
Machinery and electrical appliances	24.9	31.2	26.7	27.3	26.1
Electric products	43.1	52.9	46.9	41.4	35.7
Watches and clocks	93.5	96.9	96.3	97.7	98.7
Toys, games, and sporting goods	60.1	73.2	66.8	80.1	79.9
Metals and metal products	37.8	46.4	48.1	34.8	35.8
All products	43.6	50.3	48.2	46.2	42.1

Source: Hong Kong Government (various years, a).

regards Hong Kong's reexports of Chinese origin to overseas markets (not shown in the tables), 74, 78, and 81 percent were products of outward processing arrangements commissioned from Hong Kong in 1991, 1992, and 1993, respectively (Hong Kong Government 1994).

Hong Kong's outward processing arrangements with China involve a combination of assembly by Chinese firms and production in China by Hong Kong–owned firms.[11] Technically, this trade is not all related to FDI but is a combination of FDI and Hong Kong *subcontracting*. However, in practice, outward processing often involves situations in which the Hong Kong investor has de facto (though not necessarily legal) control of the operations.

We can compare the above outward processing activities with the extent of intrafirm trade involving U.S. multinationals. In essence, we compare intrafirm

11. I discuss the different types of foreign investment in China immediately following the section on outward processing from Hong Kong.

Table 5.12 **Intrafirm Exports and Intrafirm Imports as a Share of Total U.S. Exports and Imports with U.S. Parents, 1989 (percent)**

Industry	Exports	Imports
Textile products and apparel	11.42	10.98
Rubber and plastics	23.88	6.23
Machinery	20.41	18.25
Electric and electronic equipment	22.16	15.45
Primary and fabricated metals	7.26	2.93
All industries	24.64	15.46

Sources: U.S. Department of Commerce (1992) and U.S. Bureau of the Census, *Statistical Abstract of the United States* (Washington, D.C.: U.S. Bureau of the Census, 1991).

trade between Hong Kong parents and their affiliates in China to that between U.S. parents and their affiliates outside the United States. But the comparison is not exact because Hong Kong outward processing can involve some local mainland Chinese enterprises. The industries also are not entirely comparable across countries. Unlike Hong Kong, the United States does not have statistics related to intrafirm trade on reexports. Nor do we expect reexports to be an important share of total trade for the United States.

From tables 5.9, 5.10, and 5.12, we see that Hong Kong–China intrafirm activity is significantly larger for most industries. For all products, 76 percent of Hong Kong's domestic exports were related to outward processing in 1989, while the percentage of intrafirm exports for the United States was only 24.6 percent. On the import side, the corresponding figures for Hong Kong and the United States were 58.1 and 15.5 percent, respectively. Using this comparison as an index of economic integration, Hong Kong is clearly more integrated with China than the United States is with the rest of the world. Next we compare the outward processing activities of Hong Kong in China to intrafirm trade between the United States and Mexico.

Table 5.13 reports related-party imports to the United States from Mexico in 1991. "Related-party trade" is defined in Section 402 (g) (1) of the Tariff Act of 1930, as amended, to include transactions between parties with various types of relationships, including "any person directly or indirectly owning, controlling, or holding with power to vote, 6 percent or more of the outstanding voting stock or shares of any organization" (U.S. Department of Commerce 1993). Related-party trade includes imports into the United States by U.S. companies from their foreign subsidiaries as well as imports by U.S. subsidiaries of foreign companies from their parent companies. I assume that imports into the United States by Mexican firms are small relative to imports by U.S. firms.

Related-party imports in textiles were more intense between the United States and Mexico than outward processing imports between Hong Kong and China, though for clothing, the figure for Hong Kong was much higher

Table 5.13 U.S. Related-Party Imports from Mexico, 1991

Product	Share of Related-Party Imports in Total Product Imports (%)
Textile yarns, fabrics, madeup articles	58.49
Articles of apparel and clothing accessories	47.15
Articles of plastics	59.33
Machinery, electrical and others	85.04
Toys and sports equipment	85.28
Electronic products and parts	89.53
Metals and metal products	43.87
All products	63.2

Source: U.S. Department of Commerce (1993).

(tables 5.10 and 5.13). For metals and metal products, the U.S. import figure was, however, higher than that for Hong Kong. Loosely speaking, FDI-related trade in 1991 was somewhat larger between Hong Kong and China than between the United States and Mexico (for all products, the percentage was 67.6 percent for Hong Kong–China vs. 63.2 percent for U.S.-Mexico). If we take FDI-related trade as one index of economic integration, then Hong Kong and China are more integrated than the United States and Mexico.

5.4.2 China's FDI-Related Trade

China's customs statistics contain information about imports and exports related to FDI (or trade related to foreign-invested firms). FDI arrangements include three types of enterprises: Sino-foreign contractual joint ventures, Sino-foreign equity joint ventures, and wholly foreign-owned enterprises. Contractual joint ventures, sometimes called cooperative ventures, are flexible arrangements that may take almost any form as long as the arrangement is acceptable to both parties. Usually the foreign partner contributes funds, equipment, and technology, and the Chinese partner supplies land, factory buildings, labor, and raw materials.[12] Legally, China discourages subcontracting in joint ventures, hoping for more transfer of technology and management skill.[13]

In addition to statistics on trade associated with FDI, there is also information about imports and exports related to foreign subcontracting, compensation trade, and processing and assembling operations (see China, General Administration of Customs, various years).[14] FDI arrangements are those in which the

12. See Sung (1991), Ash and Kueh (1993), and Fung (1997) for further discussion of the three types of enterprises.

13. But according to my own interviews with Hong Kong businessmen, in practice subcontracting seems to be quite common among joint ventures as well.

14. Ash and Kueh (1993), Sung (1991), and Fung (1997) discuss these activities.

Table 5.14 Foreign-Investment–Related Trade in Mainland China

Trade Category	1992		1993	
Imports				
Total	24.36	(100)	34.37	(100)
Processing and assembling	12.64	(51.89)	12.97	(37.73)
Equipment imported for processing and assembling	1.207	(4.96)	1.324	(3.85)
Equipment and materials imported as investment by FDI	8.018	(32.92)	16.63	(48.38)
Compensation trade	0.250	(1.02)	0.330	(0.96)
Materials or components imported by FDI for manufacturing products for domestic use	2.243	(9.21)	3.121	(9.08)
Exports				
Total	15.60	(100)	16.28	(100)
Processing and assembling	15.30	(98.09)	15.96	(98.07)
Compensation trade	0.298	(1.91)	0.314	(1.93)

Source: China, General Administration of Customs (various years).

Note: Figures are in billions of U.S. dollars. Numbers in parentheses are shares of foreign-investment–related imports and exports.

foreign investors have some legal control of the enterprises. In subcontracting, the Chinese partner has legal control of the operations.[15] In processing and assembling, the foreign entity gives its manufacturing operation to a Chinese partner, providing the necessary materials and selling the finished products abroad. In return, the Chinese partner gets subcontracting fees for conducting the prescribed operations (usually no more than 10 percent of the value of the finished products; see Lardy 1994). In compensation trade, the foreign partner provides the Chinese partner with equipment and receives products in return. Outputs from subcontracting have to be exported. Outputs from FDI can be sold domestically (Sung 1991). In this paper, foreign investment refers to both FDI and foreign subcontracting. Until recently, investments from Hong Kong and Taiwan tended to concentrate on subcontracting, while investments from the United States and Japan tended to concentrate on FDI (Fung 1997; Fung and Iizaka 1998). Table 5.14 decomposes Chinese imports and exports associated with different kinds of foreign investments (both FDI and foreign subcontracting) for the years 1992 and 1993.

According to China's customs statistics, 33.0 percent of 1993 Chinese imports were related to FDI and subcontracting while 17.7 percent of exports were related to subcontracting.[16] The bulk of imports associated with foreign investment were processing and assembling (37.7 percent of imports related to

15. But in practice, the Chinese partner manufactures according to the orders given by the foreign partner, who arguably has real control.

16. These figures are calculated by dividing foreign-investment–related imports and exports by China's total imports and exports for 1992 and 1993.

Table 5.15 Trade by FDI Enterprises in Guangdong Province (Customs Source)

Enterprise Category	1989	1992	1993
Imports			
Total	4.85	13.95	19.80
Sino-foreign contractual joint venture	1.14	3.32	5.88
Sino-foreign equity joint venture	3.11	7.43	9.28
Foreign-owned enterprise	0.61	3.19	4.64
Exports			
Total	3.53	10.79	14.37
Sino-foreign contractual joint venture	0.71	2.40	3.35
Sino-foreign equity joint venture	2.26	5.69	6.88
Foreign-owned enterprise	0.56	2.70	4.14

Source: China, General Administration of Customs (various years).
Note: Figures are in billions of U.S. dollars.

foreign investment in 1993) and equipment and materials imported as investment by FDI (48.4 percent of imports related to foreign investment in 1993).[17]

We can further focus on trade activity related to foreign investment in two provinces where foreign investment from Hong Kong and Taiwan is most intense: Guangdong and Fujian. There are two sets of data on trade related to foreign investment in these two provinces, one from China's customs statistics and the other from the statistical yearbooks of the respective provinces.[18] The customs data show imports and exports related to the three types of foreign enterprises. Imports and exports of these foreign firms are growing rapidly. For example, in Guangdong, total exports from foreign firms grew by 33.1 percent while imports grew by 41.9 percent in 1993 (table 5.15).[19] Trade (both imports and exports) related to foreign-owned enterprises is an increasing share of total FDI-related trade in both provinces. In Fujian, 55.5 percent of FDI exports and 49.0 percent of imports were from foreign-owned enterprises in 1993 (table 5.16). Since the tour by Deng to southern China in early 1992, there has been a rush of FDI to China from Hong Kong and Taiwan firms. Part of the general increase in imports and exports in 1993 may reflect this trend.

The *Guangdong Statistical Yearbook* and the *Fujian Statistical Yearbook* have different classifications from the customs statistics, and the classifications of these yearbooks also differ from one another. The provincial yearbooks attempt to separate out FDI and foreign subcontracting. According to these yearbooks, in 1991, 45 percent of Guangdong's exports were associated with either

17. On the export side, exports by foreign-invested firms amounted to U.S.$25.2 billion, or 27.5 percent of Chinese total exports (Lardy 1994). Total exports associated with foreign investment (both FDI and subcontracting) in 1993 were 45 percent of total Chinese exports.

18. China, Provincial Government of Guangdong (various years) and China, Provincial Government of Fujian (various years). Ash and Kueh (1993) also contains discussions of trade related to foreign investment in Guangdong and Fujian.

19. Growth rates are not shown in tables 5.15 and 5.16.

Table 5.16 **Trade by FDI Enterprises in Fujian Province (Customs Source)**

Enterprise Category	1989	1992	1993
Imports			
Total	0.760	2.50	3.57
Sino-foreign contractual joint venture	0.047	0.106	0.201
Sino-foreign equity joint venture	0.591	1.31	1.63
Foreign-owned enterprise	0.120	1.09	1.75
Exports			
Total	0.490	1.93	2.49
Sino-foreign contractual joint venture	0.047	0.0908	0.123
Sino-foreign equity joint venture	0.363	0.929	0.984
Foreign-owned enterprise	0.086	0.910	1.382

Source: China, General Administration of Customs (various years).
Note: Figures are in billions of U.S. dollars.

Table 5.17 **Foreign-Investment–Related Trade of Guangdong Province (Guangdong Source)**

Trade Category	1988	1989	1990	1991
Imports				
Guangdong imports	5.11	4.83	5.75	8.51
FDI enterprise	1.13	1.95	3.30	4.51
Exports				
Guangdong exports	7.48	8.17	10.6	13.7
Processing and assembling	0.347	0.578	0.583	0.800
Compensation trade	0.06	0.06	0.078	0.095
FDI enterprise	1.20	2.28	3.72	5.33

Source: China, Provincial Government of Guangdong (various years).
Note: Figures are in billions of U.S. dollars.

subcontracting or FDI (table 5.17). The bulk of it was from FDI enterprises (38.9 percent). In Fujian, 9.4 percent came from subcontracting (table 5.18). But there is no record of exports by foreign-invested firms in the *Fujian Statistical Yearbook.* Furthermore, if we look at the reported FDI exports from the statistical yearbook and compare these exports with those in the customs statistics, the data differ quite significantly. In general, data from the customs statistics are more reliable.

Another interesting question about foreign firms in China is where their products are going.[20] If they are made under subcontracting arrangements, then they are exported. But if they are produced by the three types of foreign enterprises, they can be intended for domestic use or for export. In 1994, the Chung-Hua Institution for Economic Research reported the results of a large-scale

20. For a comparison of U.S. firms and Japanese firms in China, see Fung and Iizaka (1998).

Table 5.18 **Foreign-Investment–Related Trade of Fujian Province (Fujian Source)**

Trade Category	1988	1989	1990	1991
Imports				
Fujian imports	1.43	1.59	1.90	2.61
Processing and assembling	0.15	0.16	0.16	0.25
Equipment and materials imported by foreign-invested enterprises	0.23	0.17	0.24	0.28
Compensation trade	0.005	0.01	0.004	0.005
Components imported by FDI for manufacturing products for domestic use	0.01	0.08	0.01	0.02
Exports				
Fujian exports	1.42	1.83	2.45	3.15
Processing and assembling	0.12	0.18	0.21	0.29
Compensation trade	0.01	0.01	0.01	0.005

Source: China, Provincial Government of Fujian (various years).
Note: Figures are in billions of U.S. dollars.

Table 5.19 **Markets for Manufactured Products Produced by Foreign Firms in Mainland China, 1992**

	Market						
Firm	Mainland China	Taiwan	Hong Kong	Europe	Japan	United States	Others
Hong Kong/Macau	35.4	12.0	13.2	7.0	7.5	14.1	10.8
United States	69.5	0.0	2.8	3.6	1.9	15.6	6.6
Taiwan	59.6	0.9	22.3	4.1	2.2	4.8	6.1
Singapore	55.2	1.0	9.7	9.0	4.2	8.0	12.9

Source: Chung-Hua Institution for Economic Research (1994).
Note: Figures are percentages of the value of sales.

survey in China on this issue. Table 5.19 indicates the export markets of the foreign firms.

From table 5.19, we see that most products of foreign firms are destined for the domestic Chinese market. U.S. firms have the highest domestic percentage, with a figure close to 70 percent. Hong Kong has the lowest percentage, with 35 percent. About 16 percent of the value of U.S. goods produced in China is for sale back to the United States. For Hong Kong firms, export markets are evenly spread over the United States, Hong Kong, and Taiwan, with the U.S. market being most important. For Taiwanese firms, after China, the largest market is Hong Kong. But it seems strange that only 0.9 percent of the sales go back to Taiwan. One reason may be that, again, exports have to go through Hong Kong before they go to Taiwan. In sum, the picture here is that foreign-invested firms sell most of their goods in China. This illustrates the growing

importance of the domestic Chinese market. For both U.S. and Hong Kong firms, the United States is the next largest market.

5.5 Issues Related to Illegal Trade

5.5.1 China-Taiwan Illegal Trade

As mentioned earlier, the Taiwanese government still has an official policy of no direct contact with mainland China. Much of the indirect trade occurs via Hong Kong as reexports. But Taiwan's import controls on the mainland's products have gradually been liberalized. By the end of 1990, indirect imports of 92 items were permitted, including all agricultural and industrial raw materials (Kao 1993).

Transshipment (using the Hong Kong government's definition) means that goods are consigned directly from the exporting country to a buyer in the importing country, though the goods are transported via Hong Kong and are usually loaded into another vessel for further journey. Since transshipment is a form of direct trade, it is illegal from Taiwan's standpoint. Transshipment is not a part of Hong Kong trade because nobody has legal possession of the goods in Hong Kong.[21] The goods do not clear customs. According to Sung (1994), Taiwan's customs allow exporters to leave final destinations open and specify Hong Kong as the port from which goods will be transported elsewhere. In Taiwan's trade statistics, such exports are entered under exports to Hong Kong. When the cargo arrives in Hong Kong, the shipping company can pick a mainland port as the final destination.

Transshipment is different from transit shipment, which means that goods do not change vessels and just pass through Hong Kong on their way to the final destination. Exporters from Taiwan claim that their goods are going to Hong Kong when they leave Taiwan and then claim in Hong Kong that they are going to the mainland (Sung 1994). Unlike transshipment, this method of direct trade is risky since it involves lying to the Taiwanese government. The Hong Kong government has data on transshipments by *weight* but does not keep records on cargo in transit. The value of transshipments is not known because transshipped goods do not go through customs. Table 5.20 reports reexports and transshipments via Hong Kong between Taiwan and mainland China.

As early as 1980s, fishing boats were conducting direct barter trade between Taiwan and Fujian. Fujian legalized this trade in 1985. But the Taiwanese government considers such trade illegal smuggling. Researchers at the Chung-

21. This definition of transshipment is different from the term "transshipment" used in popular discussions of Chinese trade. In the popular press, "transshipment" is often used in the context of false declaration of origins and misuse of quotas, particularly Multifiber Arrangement (MFA) quotas.

Table 5.20 Reexports and Transshipments via Hong Kong: Taiwan and China

Year	Reexports		Transshipments	
1989	2,897	(587)	33,283	(6,662)
1990	3,283	(766)	43,757	(12,447)
1991	4,685	(1,130)	272,475	(87,610)
1992	6,336	(1,128)	527,427	(211,026)

Sources: Hong Kong Government (various years, b) and Hong Kong Government, *Hong Kong Shipping Statistics* (Hong Kong: Census and Statistics Department, various years).

Note: Reexports are in millions of U.S. dollars; transshipments are in tons. Numbers without parentheses are reexports and transshipments from Taiwan to China via Hong Kong. Numbers in parentheses are reexports and transshipments from China to Taiwan via Hong Kong.

Table 5.21 Taiwan's Exports to Mainland China

Year	Reexports via Hong Kong	Reexports via Others	Direct Exports		Total	
1988	2,242	960	116	[236]	3,318	[3,438]
	(3.6)				(5.5)	(5.7)
1989	2,896	1,241	642	[793]	4,779	[4,930]
	(4.4)				(7.2)	(7.4)
1990	3,278	1,405	1,361	[1,525]	6,044	[6,208]
	(4.9)				(9.0)	(9.2)
1991	4,679	2,005	3,189	[3,399]	9,873	[10,083]
	(6.1)				(13.0)	(13.3)
1992	6,288	2,695	5,392	[4,705]	14,375	[13,688]
	(7.2)				(17.6)	(16.8)

Sources: Kao (1993), Sung (1994), and Taiwan, Ministry of Finance (various years).

Note: Figures are in millions of U.S. dollars. Numbers in parentheses are percentages of total Taiwanese exports. Numbers in brackets are alternative estimates from Sung (1994).

Hua Institution for Economic Research estimated that in the late 1980s such smuggling of mainland Chinese goods to Taiwan was about one-third of Hong Kong reexports of Chinese goods to Taiwan (Kao 1993). For 1989, this estimate puts the value of such illegal trade at U.S.$195 million.

Table 5.21 reports Taiwanese exports to China via Hong Kong, exports via other places (Singapore, Japan, Guam, etc.), and illegal direct exports (including transshipment, transit shipment, minor trade, etc.). Total Taiwanese exports to mainland China are significantly higher than "legal" trade alone. In 1991 and 1992, the percentages of illegal trade were 31.3 and 36.5 percent, respectively. In 1992, illegal exports (direct exports) were between 52 and 60 percent of legal exports (reexports through Hong Kong and elsewhere). As indicated in table 5.22, the corresponding figure for imports was between 44 and 76 percent.

Table 5.22 Taiwan's Imports from Mainland China

Year	Reexports via Hong Kong	Reexports via Others	Direct Imports		Total	
1988	478	205	n.a.	[14]	683	[697]
	(1.0)				(1.4)	(1.43)
1989	586	251	93	[37]	930	[874]
	(1.1)				(1.8)	(1.69)
1990	765	328	320	[70]	1,413	[1,163]
	(1.4)				(2.6)	(2.14)
1991	1,129	484	595	[501]	2,208	[2,114]
	(1.8)				(3.5)	(3.35)
1992	1,119	479	698	[1,219]	2,296	[2,817]
	(1.6)				(3.2)	(3.93)

Sources: Kao (1993), Sung (1994), and Taiwan, Ministry of Finance (various years).

Note: Figures are in millions of U.S. dollars. Numbers in parentheses are percentages of total Taiwanese imports. Numbers in brackets are estimates by Sung (1994).

5.5.2 Other Forms of Illegal Trade

While illegal trade between Taiwan and China arises primarily from the policies of the Taiwanese government, there are also other more standard forms of illegal trade such as smuggling and tariff evasion, as documented by Sung (1991), Lardy (1994), and West (1995). In 1993, Chinese customs seized a record of U.S.$0.41 billion in smuggled products, an increase of almost 80 percent over the 1992 level. From 1981 to early 1993, more than 10,000 cases of smuggling at sea were discovered.[22]

Geographically, smuggling as a form of illegal trade is now a *national* rather than regional phenomenon. In the past, smuggling was confined mainly to southern coastal areas. In recent years, it has spread all the way up to the coast of Shandong and Dalian. However, it is unclear whether the increase in reported smuggling reflects improved enforcement or greater incidence of smuggling.

Smuggling is most popular for products whose import is restricted by the government, either by tariffs or other barriers. From an economic standpoint, this illegal trade may be regarded as induced by inefficient governmental interventions.[23] Commonly smuggled items include color television sets, cars, cigarettes, motorcycles, air conditioners, steel products, and polyester fibers. In the first quarter of 1993, cars and cigarettes were reported to be the number one and number two smuggled goods.[24]

One can often get an idea of how significant smuggling is by comparing

22. West (1995) contains a more detailed discussion.

23. Some of the governmental interventions in U.S.-China trade are imposed by the U.S. government. In textile and clothing, trade is regulated via the MFA. In high-technology trade, the U.S. government imposes some export controls (Richardson 1993).

24. See West (1995) for further discussion.

bilateral trade statistics, preferably by quantity and, with some care, also by value. For example, according to South Korean customs, between January and April 1993 South Korea exported 26,688 cars to China, but Chinese customs statistics show only 166 cars imported from South Korea for the same period. One can infer that some of the "missing" cars have been smuggled into China to avoid Chinese customs (West 1995).

In the first quarter of 1994, about 35 percent of the major reported smuggling cases involved the use of fake customs certificates, seals, and customs officers' signatures. There are also false declarations of origin (Lardy 1994). It has been reported that a Thai certificate of origin can be obtained for as little as $100 (Sung 1991). The U.S. Trade Representative (USTR) reported that U.S. Customs Service officers have found Chinese goods illegally labeled in at least 25 other nations, including Honduras, Panama, and Hong Kong.

5.6 Conclusion

In this paper I try to clarify various conceptual and data issues related to China's trade. China's trade is characterized by at least *three* features: high incidence of reexports via Hong Kong, high incidence of trade related to foreign investment, and high incidence of "illegal" trade, most notably with Taiwan. There are also indications that illegal trade in the form of smuggling and evasion of trade barriers is spreading to China's trade with all its trading partners.

In 1993, 67 percent of China's exports were reexported via Hong Kong, and 34 percent of China's imports were reexports via Hong Kong from the rest of the world. These reexports complicate China's trade data with all its trading partners, and not until 1993 did China differentiate these reexports from trade with Hong Kong. If we take these reexports and reexport margins into account, bilateral U.S.-China trade deficits (using U.S. trade data) must be adjusted downward by about 35 percent. Reexport and reexport margins affect not only Chinese trade data but also make other countries' trade data with China inaccurate.

Much of China's trade is also foreign investment related. According to Chinese data, in 1993, 45.2 and 33 percent of Chinese exports and imports, respectively, were due to foreign firms and foreign subcontracting.[25] In 1991, according to Guangdong data, about 44 percent of Guangdong's exports were associated with foreign investments. Furthermore, there are good reasons to believe that this figure is understated.

With respect to China–Hong Kong trade, 74.0 percent of China's imports from Hong Kong were related to outward processing in 1993. For China's exports to Hong Kong, the corresponding figure was 73.8 percent. Of the reex-

25. In 1993, exports associated with subcontracting alone were 17.7 percent while exports associated with FDI were 27.5 percent.

ports of Chinese goods to overseas markets via Hong Kong, 81.0 percent were commissioned by Hong Kong firms, while 42.1 percent of reexports via Hong Kong to China were due to outward processing.

"Illegal" trade between mainland China and Taiwan was primarily induced by Taiwan's policy banning direct trade. Most of the legal exports from Taiwan to mainland China occur as reexports via Hong Kong. In 1992, illegal direct exports from Taiwan to mainland were between 52 and 60 percent of legal indirect exports. There are also some indications that other forms of illegal trade such as smuggling may be spreading. But other than a few isolated figures, it is difficult to get accurate estimates of illegal trade.

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Comment

Marcus Noland

It's a dirty job but someone had to do it, and K. C. Fung has written a very useful paper plowing through the accounting morass of China's burgeoning trade. I will simply elaborate on three issues: valuation, trade between Taiwan and China, and transshipment and smuggling.

Valuation

The issue of Hong Kong reexport margins is particularly salient because of the asymmetrical role Hong Kong plays in intermediating imports and exports in U.S.-China trade. The reason is that U.S. exports to China are concentrated in products such as aircraft, chemicals, and logs in which Hong Kong firms do not play much of an intermediation role and the products are shipped directly from the United States to China. In contrast, Chinese exports to the United States are concentrated in light manufactures in which Hong Kong firms are more active in ancillary manufacturing activities such as packaging, and indeed many of these exports originate from Hong Kong–owned plants in China.

In any event, policy reforms and the real exchange rate changes of the late 1980s have led to a relocation of light manufactures production from Hong Kong and Taiwan to China. Again, it would be interesting to evaluate the "shifting surplus" story depicted in table 5C.1 in light of Fung's accounting adjustments.

Taiwan Trade

Trade between Taiwan and China is booming. In March 1995, Hong Kong replaced the United States as Taiwan's largest export destination for the first time ever. In May 1995, the Taiwanese government announced that it would begin to permit direct shipping across the Taiwan Straits to the mainland. Trade was $14.4 billion in 1993 based on Chinese government figures, $13.74 according to the ROC Board of Trade; some 30,000 Taiwan businesses have an

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Table 5C.1 Bilateral U.S.-Chinese Economic Area Trade Balances

Year	Chinese Economic Area	People's Republic of China	Hong Kong	Taiwan
1987	−25.9	−2.8	−5.9	−17.2
1988	−20.6	−3.5	−4.6	−12.6
1989	−22.6	−6.2	−3.4	−13.0
1990	−24.4	−10.4	−2.8	−11.2
1991	−23.7	−12.7	−1.1	−9.8
1992	−28.4	−18.3	−0.7	−9.3
1993	−31.4	−22.8	0.3	−8.9
1994	−37.4	−29.5	1.7	−9.6
1995	−39.6	−33.8	3.9	−9.7

Source: U.S. Department of Commerce.

Note: Figures are customs valuation, in billions of U.S. dollars.

estimated $20 billion (give or take $5 billion) invested in China. (Again, figures are highly uncertain because of circumvention of Taiwanese capital controls.) Taiwanese firms are beginning to set up R&D facilities, as well as production facilities, on the mainland. And, indeed, the Taiwanese are probably the biggest investors in China.

This poses a real political dilemma for the Taiwanese authorities. On the one hand, trade with and investment in the mainland is the logical result of shifting comparative advantage. On the other hand, increased contact poses a potential security threat in the narrow sense and loss of independence in a deeper sense. The Taiwanese government has become concerned about dependence, and in 1992 the government introduced a new monitoring system based on customs data released by the Hong Kong government on growth rate and market share of 30 leading imports and exports transshipped through Hong Kong. The 100-point system is divided into cold, cool, normal, warm, and overheated. The government has also introduced a "Look South" policy of encouraging investment diversion away from the mainland and toward Southeast Asia, but it is not obvious that the policy is having much effect.

Some interesting surveys of the activities of Taiwanese firms in China have been done. In 1992, the Ministry of Economic Affairs found that 18.5 percent of firms primarily sold their output within the People's Republic of China, 12.1 percent exported back to Taiwan, and the remainder primarily exported the output to third markets, supporting the shifting surplus story. Indeed, the worsening intellectual property rights disputes between the United States and China can in some part be seen as a case of Taiwan offloading its pirate activities (at least with respect to compact disks) to China.

A subsequent survey in 1993 by the Chung-Hua Institution for Economic Research found that 63.75 percent of Taiwanese firms in China primarily procured intermediates from Taiwan, while 20 percent indirectly purchased parts from Chinese suppliers.

With respect to financing, nearly three-quarters of Taiwanese plants in China are financed from Taiwan (72.25 percent), 17.2 percent get their financing from Chinese financial institutions, 7.0 percent are financed by banks in third countries, and 1.45 percent get financing from Chinese subsidiaries of third-country banks. In 1993 the first Taiwanese firm, Tsann Kuen Enterprise Ltd., an appliance maker, listed on a mainland stock exchange (Shenchen).

Transshipment

Last, on the issue of transshipment and smuggling, there is one channel that Fung does not mention. South Korean firms currently transship through China to North Korea and then back again. This trade is in the hundreds of millions of dollars and growing rapidly, though how it continues is obviously contingent on North Korea–South Korea relations. Also, there is significant smuggling across the North Korea–China border. Again, observers have put the magnitude in the hundreds of millions of dollars.

The real money is in textile and apparel transshipment, however, and I believe that Fung has grossly underestimated the quantitative importance and policy relevance of this issue. In an earlier version of the paper, transshipment to circumvent the Multifiber Arrangement was brushed off in two sentences, with the statement that the estimated $2 billion in illegal textile imports into the United States is an inflated figure from a textile producer group. My understanding is that figure comes from the U.S. Customs Service.

China circumvents its bilateral textile and apparel quotas, mainly by transshipping products through third countries that are also covered by bilateral quotas. In other words, the Chinese substitute their products for the unfulfilled quotas of third countries. A Treasury study also put the value of these transshipments at $2 billion. The main transshipment points are the high-wage locations of Hong Kong, Taiwan, Macau, and Singapore. Textile and apparel imports from these four countries were $8.5 billion in 1993. In other words, the Treasury figure implies that nearly 25 percent were transshipped.

A bilateral agreement on this issue was signed in January 1994. Government sources indicate that the problem appears to be getting worse, however. According to the Customs Service (not the textile lobby!), there appears to be roughly $10 billion in Chinese textiles and apparel floating around the world not properly accounted for.

For example, Chinese customs officials reported $13 billion in exports to 120 countries in 1992. Eighty-one countries alone reported $23.7 billion of imports from China in the same year. (The Ministry of Foreign Trade and Economic Cooperation reports $7.7 billion in textile and apparel exports in 1992, making the discrepancy even bigger.)

China reports $6.4 billion in textile and apparel exports to Hong Kong in 1992. Hong Kong reports $8.6 billion in consumption imports (a enormous figure), and $9.7 billion in reexports. Even allowing for high reexport markups, these discrepancies are huge.

The Customs Service found that half of the 36 fastest growing apparel suppliers to the U.S. market had no significant domestic production for export but reported a significant increase in imports from China. Kenya, for example, has recently experienced a 790 percent growth rate in apparel imports from China, and a 212 percent growth in exports to the United States. Other countries, including Belize, the Czech Republic, Ecuador, and Qatar, exhibit similar triple-digit growth rates. All in all, the Treasury Department estimates that at least $200 million of illegally transshipped apparel is coming into the United States through these countries.

Transshipping is currently subject to criminal prosecution, and the Customs Service and the Justice Department have launched an ambitious campaign to prosecute transshippers. There was recently a major conviction involving a Chinese state-owned firm.

Transshipping is potentially a big issue. Growing imports from China put downward pressure on the wage rates of low-skilled American workers. Moreover, the United States and China clash over issues such as China's desultory human rights record and arms proliferation. This is a combination that is likely to spell trouble for U.S.-China relations and could have a big impact on things like China's accession to the World Trade Organization.

Conclusion

When asked about an apparent musical plagiarism, Ringo Starr reportedly replied, "When you steal, steal from the best." I will give a paper next month in Hong Kong called "China in the World Economy." I am sure that I will be able to make good use (with proper attribution, of course) of "Accounting for Chinese Trade: Some National and Regional Considerations."

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